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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/336,636

06/18/1999

KAZUTOMO HASEGAWA

FUJA-16.217

7893

26304

7590

11/02/2004

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EXAMINER

KUMAR, PANKAJ

ART UNIT

PAPER NUMBER

2631

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/336,636

Applicant(s)

HASEGAWA ET AL.

Examiner

Pankaj Kumar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18, 20-32 and 34-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-18, 20-32, 35 and 36 is/are allowed.
- 6) ☒ Claim(s) 34, 37 and 38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Arguments for claim 34 are moot due to new ground of rejection for claim 34.
2. The examiner called and spoke with Thomas Bean, as requested in his response, on 10/21/2004 and told him that this application is not allowed because of a new reference.

Response to Amendment

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim 38 is rejected under 35 U.S.C. 102(e) as being anticipated by Long 6804267.
5. Here is how the reference teaches the claim:
6. As per claim 38: a unit for transmitting a signal of said asymmetric digital subscriber line unit (Long fig. 5: 4 ADSL) in a far end cross talk duration while said asymmetric digital subscriber unit is in training (Long fig. 17: echo in FEXT 1708, train transceiver in presence of echo 1706).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Amrany 6,580,752.

9. As per claim 34: means for generating a sliding window (Amrany 6,580,752 col. 6 line 58: sliding window) based on a TCM-ISDN (Amrany 6,580,752 col. 2 line 4: TCM-ISDN) timing signal representing a periodical noise duration (Amrany col. 6 lines 46-51: sometimes NEXT noise and sometimes FEXT noise); and means for discriminating, based on a status of said sliding window (Amrany 6,580,752 col. 6 line 58: sliding window), which kinds of durations of said periodical noise duration a transmitting DMT symbol belongs to (Amrany col. 6 lines 38-39, lines 52-53: determination is made when the system is in FEXT mode and NEXT mode).

10. Amrany does not teach discrete multitone modulation (DMT). Amrany does suggest in col. 1 lines 36-41 that crosstalk (NEXT and FEXT) are due to modulated signals. DMT is a modulated signal (discrete multitone modulation). It would have been obvious to one skilled in the art at the time of the invention to modify Amrany to teach that its invention applies for a DMT signal. One would be motivated to do so since Amrany teaches NEXT and FEXT for all modulations and thus DMT is encompassed by Amrany teaching of modulation.

11. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Long 6804267.

12. As per claim 37: performing the transceiver training in a far end cross-talk duration while an initialization is performed by a single bit map mode (Long fig. 17: echo in FEXT 1708, train transceiver in presence of echo 1706, Single Bitmap is a special case of DBM" Col. 4 lines 21-

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22). What Long does not teach is a single bit map. It is common knowledge that dual bitmap (DBM) is composed of two single bitmaps. It would have been obvious to one skilled in the art at the time of the invention to modify Long to teach single bitmap. One would be motivated to do so since Long teaches that DBM pertains to both bit rates under NEXT and FEXT while single bitmap pertains to bit rates under FEXT (Long: col. 3 lines 62-64: "DBM allows full-duplex operation of TCM-DSL modems by employing different bit rates under NEXT and FEXT interference, respectively.")

Allowable Subject Matter

13. The following is an examiner's statement of reasons for allowance: Claims 1-18, 20-32, 35-36 are allowed based on reasoning cited in prior actions.

14. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pankaj Kumar whose telephone number is (571) 272-3011. The examiner can normally be reached on Mon, Tues, Wed and Thurs after 8AM to after 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad H. Ghayour can be reached on (571) 272-3021. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PK

TESEALDE/BOCURE
PRIMARY EXAMINER

